BRUHUT BANGALURU MAHANAGARA PALIKE

NAME OF WORK:Improvements to roads and drains at Kuvempunagar 2nd Stage and surrounding areas in ward no. 11 in Kuvempunagar

2019

DETAILED ESTIMATE

SUBMITTED TO B.B.M.P, BANGALORE

BRUHAT BANGALORE MAHANAGARA PALIKE

NAME OF WORK:- Improvements to roads and drains at Kuvempunagar 2nd Stage and surrounding areas in ward no. 11 in Kuvempunagar

								Estimation Cost.Rs	**9900000.00**
Sl No	**Description of work**		**Mesurement**				**Qty**	**Rate**	**Amount**
		Unit	**No.**	**L**	**B**	**D**			
1	KSRRB 300-1. **Earthwork excavation by manual means for roads,** drains & similar works in ordinary soil excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications(P.No-143 &136 ,I No-19.1&17.4& 17.1) 5km lead= 57+2.0x1.28x5 =69.80								
	New Drain								
	Hosabalu Nagara Cross road	Cum	2	115.20	1.10	1.05	266.11		
	Kuvempunagar 2nd Stage								
	3rd Main Road	Cum	2	77.8	1.10	1.05	179.60		
	Desilt for Drain								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Cum	2	70.00	0.60	0.60	50.40		
	Triveni Road	Cum	2	51.00	0.60	0.60	36.72		
	Chowddya Road	Cum	2	56.05	0.60	0.60	40.36		
	3rd Cross Road Pateel Chowdry Road	Cum	2	76.65	0.60	0.60	55.19		
	2nd Cross Road (Triveni Road)	Cum	2	72.15	0.60	0.60	51.95		
	For Flagging Course								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Cum	2	70.00	0.30	0.60	25.20		
	Triveni Road	Cum	2	51.00	0.30	0.60	18.36		
	Chowddya Road	Cum	2	56.05	0.30	0.60	20.18		
	3rd Cross Road Pateel Chowdry Road	Cum	2	76.65	0.30	0.60	27.59		
	2nd Cross Road (Triveni Road)	Cum	2	72.15	0.30	0.60	25.97		
	Over Burden	Cum	2	30.00	0.45	0.30	8.10		
	Basic rate							130.00	
	Area weightage 6%							7.80	
	5Km lead & Lift= 57+(2*1.28*5)							69.80	
	Total						**805.73**	**207.60**	**167271.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.27-I.No.5.33)								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Sqm	2	70.00	1.80		252.00		
	Triveni Road	Sqm	2	51.00	1.80		183.60		
	Chowddya Road	Sqm	2	56.05	1.80		201.78		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	3rd Cross Road Pateel Chowdry Road	Sqm	2	76.65	1.80		275.94		
	2nd Cross Road (Triveni Road)	Sqm	2	72.15	1.80		259.74		
					Sub Total		**1173.06**		
	Consider 30% Missing or Damaged Slab						**351.92**		
	Basic rate							105.00	
	Area weightage 6%							6.3	
	Total						**821.14**	**111.30**	**91394.00**
3	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.27,I.No.5.31.1)								
	Consider 30% Missing or Damaged Slab	Sqm					**351.92**		
	Basic rate							700.00	
	Area weightage 6%							42.00	
						Total	**351.92**	**742.00**	**261124.00**
4	KSRB 4-1.3 : Providing and laying in position plain cement concrete of Mix 1:4:8 with OPC @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	For Flagging Course								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Cum	2	70.00	0.30	0.15	6.30		
	Triveni Road	Cum	2	51.00	0.30	0.15	4.59		
	Chowddya Road	Cum	2	56.05	0.30	0.15	5.04		
	3rd Cross Road Pateel Chowdry Road	Cum	2	76.65	0.30	0.15	6.90		
	2nd Cross Road (Triveni Road)	Cum	2	72.15	0.30	0.15	6.49		
	For Road								
	Kuvempu nagar								
	RO Plant Road (church Back Side road)	Cum	1	113.10	4.95	0.15	83.98		
	10th Cross Road	Cum	1	74.30	4.85	0.15	54.05		
	3rd Cross Road Pateel Chowdry Road	Cum	1	77.30	4.7	0.15	54.73		
	Gudde Vinayaka temple back Side	Cum	1	66.00	4.95	0.15	49.01		
	Deduction								
		Cum	-8	0.64		0.15	-0.76		
				Area of Circle=(3.14X0.9²)/4=0.64					
		Cum	-1	1.70	0.60	0.15	-0.15		
	Basic rate							5102.00	
	Area weightage 6%							306.12	
						Total	**270.17**	**5408.12**	**1461133.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
5	KSRB 5-14: Providing and constructing load bearing wall with solid concrete blocks having block density not less than 1800kg/m3 having a minimum average compressive strength of 4.00 N/mm2 confirming to IS 2185 (Part 1):2005 and constructed with CM 1:4, as per IS 2572:2005 including cost of all materials labour charges, scaffolding, curing, hire charges of machineries etc., complete as per specifications. blocks of size 400x200x200mm KBS No.5.4 (P.No-27,I No-5.26.1)								
	For Flagging Course								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Sqm	4	70.00		0.60	168.00		
	Triveni Road	Sqm	4	51.00		0.60	122.40		
	Chowddya Road	Sqm	4	56.05		0.60	134.52		
	3rd Cross Road Pateel Chowdry Road	Sqm	4	76.65		0.60	183.96		
	2nd Cross Road (Triveni Road)	Sqm	4	72.15		0.60	173.16		
	Basic rate							962.00	
	Area weightage 6%							57.72	
						Total	**782.04**	**1019.72**	**797462.00**
6	KSRB 4-1.6 ; Providing and laying in position **plain cement concrete of Mix 1:2:4** with OPC @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No-13,I No-4.6)								
	For Flagging Course								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Cum	4	70.00	0.20	0.10	5.60		
	Triveni Road	Cum	4	51.00	0.20	0.10	4.08		
	Chowddya Road	Cum	4	56.05	0.20	0.10	4.48		
	3rd Cross Road Pateel Chowdry Road	Cum	4	76.65	0.20	0.10	6.13		
	2nd Cross Road (Triveni Road)	Cum	4	72.15	0.20	0.10	5.77		
	Basic rate							5422.00	
	Area weightage 6%							325.32	
	Total						**26.07**	**5747.32**	**149822.00**
7	KSRB 4-1.2 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2								
	New Drain								
	Hosabalu Nagara Cross road	Cum	2	115.20	1.10	0.15	38.02		
	Kuvempunagar 2nd Stage								
	3rd Main Road	Cum	2	77.8	1.10	0.15	25.66		
	Basic rate							5194.00	
	Area weightage 6%							311.64	
						Total	**63.67**	**5505.64**	**350564.00**

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
8	Providing laying plain/ reinforced cement concrete for side Drains Using M20 nominal mix Concrete with OPC at 300kgs.With 20mm and Down size granite metal coarse aggregate at 0.69cum and fine aggregate at 0.43cum Machne mixed, well compacted for wall and Bottom including centering shuttering,cost of materials,HOM of Machinery,Curing Etc.,Complete Excluding cost of Steel as per morth MORTH specification No. 1500, 1700, 2200. Including Cost of material, Labour, HOM complete as per Specification-WALL & Bottom thickness 15Cm(Item No 37.59.2 page no 271)								
	Bottom Raft								
	Hosabalu Nagara Cross road	Cum	2	115.20	0.90	0.15	31.10		
	Kuvempunagar 2nd Stage								
	3rd Main Road	Cum	2	77.8	0.90	0.15	20.99		
	Walls								
	Hosabalu Nagara Cross road	Cum	4	115.20	0.15	0.6	43.55		
	Kuvempunagar 2nd Stage								
	3rd Main Road	Cum	4	77.8	0.15	0.60	27.99		
	Basic rate							6670.00	
	Area weightage 6%							400.20	
	Total						**123.63**	**7070.20**	**874104.00**
9	KSRB M2200-6 Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. MORTH Specification NO.1600&2200Specification No. Pg No.229 Item No.28.8.2								
	For Drain	Cum					123.63		
		kg	Steel assumed 70Kg/Cum of Concrete				8654.25		
		tonne					**8.65**		
	Basic rate							68233	
	Area weightage 6%							4093.98	
	Total						**8.65**	**72326.98**	**625936.00**
10	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	Drain cover slab								
	Hosabalu Nagara Cross road	Sqm	2	115.20	0.90		207.36		
	Kuvempunagar 2nd Stage								
	3rd Main Road	Sqm	2	77.75	0.90		139.95		
	For Flagging Course								
	Kuvempunagar 2nd Stage								
	Kaliyamma Temple Road	Sqm	2	70.00	0.90		126.00		
	Triveni Road	Sqm	2	51.00	0.75		76.50		
	Chowddya Road	Sqm	2	56.05	0.90		100.89		
	3rd Cross Road Pateel Chowdry Road	Sqm	2	60.50	0.90		108.90		

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
	2nd Cross Road (Triveni Road)	Sqm	2	72.15	0.75		108.23		
	Missing Slabs	Sqm	10	0.90	0.60		5.40		
							873.23		
	Deduct BS Slab 24% in Front of House						**87.32**		
	Data rate							**2337.00**	
	Total						**785.90**	**2337.00**	**1836655.00**
11	Providing and fixing **pre cast solid cement concrete kerb stones** made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation ete.,complete. As per the direction of Engineer incharge. (P.No.27, I.No.5.30 of PW, P&IWTD SR 2018-19)								
	Kuvempunagar 2nd Stage								
	3rd Main Road	**Nos**	2	77.8		/0.45	346.00		
	Basic rate							408.00	
	Area weightage 6%							24.48	
	Total						**346.00**	**432.48**	**149639.00**
12	KSRRB 800-1. **Painting two coats** after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)								
	Kuvempunagar 2nd Stage								
	3rd Main Road	**Sqm**	2	77.8		0.35	54.43		
	Basic rate							80.00	
	Area weightage 6%							4.80	
	Total						**54.43**	**84.80**	**4616.00**
13	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.140- I.No.18.47) & Pg No.136, Item No.17.4,17.1 (5km lead = 57+2*1.28X5)								
	Kuvempu nagar								
	RO Plant Road (church Back Side road)	Cum	1	113.10	4.95	0.20	111.97		
	10th Cross Road	Cum	1	74.30	4.85	0.20	72.07		
	3rd Cross Road Pateel Chowdry Road	Cum	1	77.30	4.7	0.20	72.97		
	Gudde Vinayaka temple back Side	Cum	1	66.00	5.0	0.20	65.34		
	Deduction								
		Cum	-8	0.64		0.20	-1.02		
				Area of Circle=(3.14X0.9²)/4=0.64					
		Cum	-1	1.70	0.6	0.20	-0.20		
	Basic rate							899.00	
	Area weightage 6%							53.94	
	5Km lead & Lift= 57+(2*1.28*5)							69.80	
	Total						**321.13**	**1022.74**	**328433.00**

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty	Rate	Amount
14	KSRRB M300-14. **Excavation for roadwork in all types of soil** by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)								
	Kuvempu nagar								
	RO Plant Road (church Back Side road)	Cum	1	113.10	4.95	0.10	55.98		
	10th Cross Road	Cum	1	74.30	4.85	0.10	36.04		
	3rd Cross Road Pateel Chowdry Road	Cum	1	77.30	4.7	0.10	36.49		
	Gudde Vinayaka temple back Side	Cum	1	66.00	5.0	0.10	32.67		
	Deduction								
		Cum	-8	0.64		0.10	-0.51		
				Area of Circle=(3.14X0.9²)/4=0.64					
		Cum	-1	1.70	0.6	0.10	-0.10		
	Basic rate							41.00	
	Area weightage 6%							2.46	
	5Km lead= (2*1.28*5)							12.80	
	Total						**160.56**	**56.26**	**9034.00**
15	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, using a grade concrete M30 over a prepared base with OPC coarse aggregate @ 0.69cum fine aggregate @ 0.46cum,coarse and fine aggregate confirming to IS:383-2016,with superplastisiser @3lts confirming to IS9103-2008mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine,and curing including cost of all materials,labour,hire chargedof machines,all lead and lift charges etc., complete as per specifications. - do with OPC at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum Pg No.176Item No.22.6.1								
	Kuvempu nagar								
	RO Plant Road (church Back Side road)	Cum	1	113.10	4.95	0.15	83.98		
	10th Cross Road	Cum	1	74.30	4.85	0.15	54.05		
	3rd Cross Road Pateel Chowdry Road	Cum	1	77.30	4.7	0.15	54.73		
	Gudde Vinayaka temple back Side	Cum	1	66.00	4.95	0.15	49.01		
	Deduction								
		Cum	-8	0.64		0.15	-0.76		
				Area of Circle=(3.14X0.9²)/4=0.64					
		Cum	-1	1.70	0.60	0.15	-0.15		
	Basic rate							4916.00	
	Area weightage 6%							294.96	
	Total						**240.85**	**5210.96**	**1255047.00**

Sl No	Description of work	Unit	Mesurement				Qty	Rate	Amount
			No.	L	B	D			
								Grand Total	8362234.00
								GST Charges (12% of estimated cost)	1003469.00
								For 3+1% KRIDL Charges	334489.00
								DPR Charges (1% of estimated cost)	99000.00
								Project management And Consultancy Charges(1% of estimated cost)	99000.00
								Miscellenious and rounding	1808.00
								Total Amount	9900000.00
								RUPEES NINETY NINE LAKHS ONLY	

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2018-2019,Issue rates and Data Rates.

Assistant Engineer

Assistant Executive Engineer

ASSISTANT EXECUTIVE ENGINEER
Vidyaranyapura Sub-Division
Bruhath Bengaluru Mahanagara Palike

Executive Engineer

ಕಾರ್ಯ ಪಾಲಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ವಿಭಾಗ
ಬೃ.ಬೆ.ಮ.ಪಾ., ಬೆಂಗಳೂರು

ADMINISTRATIVE APPROVAL

Accorded For Rs. 99.00 Lakhs. Ninety Nine Lakhs Only

Head of A/c. P3727. Sc-sp/ts p.

Div. Ref. No. 68/19-20 Date 24/10/19

24/10

AE

EE(BTP)

Accorded For 99.00 Ninety Nine Lakhs

Head of A/C. P-3727

CER NO : 1444 Dt: 28-10-19